

Norman H. Bangerter Governor Suzanne Dandoy, M.D., M.P.H. Executive Director Kenneth L. Alkema Director

## DEPARTMENT OF HEALTH DIVISION OF ENVIRONMENTAL HEALTH

288 North 1460 West P.O. Box 16690 Salt Lake City, Utah 84116-0690 (801) 538-6121

CERTIFIED MAIL (Return Receipt Requested)

FEB 01 1991

OIL, GAS & MINING

January 31, 1991

Mr. Bryon Johnson, Environmental Specialist Hecla Mining Company 6500 Mineral Drive Box C - 8000 Coeur d'Alene, Idaho 83814-1931

> RE: Ground Water Permit for Tailings Pond, Escalante, Utah

## Dear Mr. Johnson:

We appreciate your response of December 7, 1990 to our request (September 18, 1990) for information regarding your tailings pond near Escalante, Utah. According to information that the Bureau of Water Pollution Control (BWPC) has, the tailings pond was originally permitted by Ranchers Exploration, March 7, 1980, and amended August 20, 1980. Ranchers Exploration has since sold the property to Hecla Mining Company. Hecla has now mined all the profitable ore and wants to close the facility, including the tailings pond. Several meetings have been held with Hecla, Division of Oil, Gas and Mining (DOGM) and BWPC this past year to discuss closure requirements. We have reviewed your latest response stating that the tailings pond will have a de minimus actual or potential effect on ground water quality. After review of the information in the report dated 9-19-90 we do not concur for the following five reasons:

- 1. Table 6-8 shows 7 to more than 100 mg/Kg total cyanide in the tailings.
- 2. The water level map, plate 1, shows the hydraulic gradient is toward the North east, an irrigated area where the ground water is used for irrigation and for culinary and stock purposes.
- 3. Ground water in the mine area contains less than 500 mg/l dissolved solids, and therefore is worth protection.

Mr. Johnson Page 2 January 31, 1991

- 4. Should cyanide be leached from the tailings pond, insufficient time has elapsed for cyanide to have reached the monitoring wells (p.8). Therefore, we do not know if leakage is occurring.
- 5. The Help model (pages 4 & 5) that you used shows that the cap may achieve tight containment, but it does not leave a stable non-hazardous residual, that at some future date could be released. Therefore, obligation remains with the party that generated the tailings.

On the basis of these objections we do not believe that a de-minimus situation exists and regulatory supervision of the site is therefore required.

In August, 1989 the Utah Water Pollution Control Committee adopted regulations for ground water protection. If future generations are to have good quality water to fill their needs, ground water quality must receive long-term protection. This need dictates that the State act now to protect the resource so that it is adequate to meet future needs. The regulations are intended to form the framework to achieve this goal. Rule R448-6.6.1B UAC states:

"all persons who construct, modify, install, or operate any existing facility not permitted by rule under R448-6-6.2, which discharges or would probably result in a discharge of pollutants that may move directly or indirectly into ground water, including, but not limited to: ... mining and metallurgical operations, including heap leach facilities; and pits, ponds, and lagoons whether lined or not ... must submit an application for a ground water discharge permit within one year after receipt of written notice from the Executive Secretary that a ground water discharge permit is required."

The intent is to require a permit for a facility or activity which in the normal conduct of the activity may have a release of pollutants to ground water. We have evaluated Hecla's need to obtain a ground water discharge permit, before site reclamation started and have determined that an actual or potential effect on ground water quality (R448-6-6.2A21 UAC) will exist if you close the facility as described in the documents you submitted. We have expressed our opinion that it would be unlikely that the tailings pond containing high concentrations of cyanide could be considered a de-minimus situation. On the basis of the above cited concerns and primarily the fact that there is more than 100 mg/kg total cyanide in the tailings, we have concluded that a permit is required. Therefore, we have determined that Hecla will need a ground water discharge permit for the Escalante Tailings pond. You have one year from the receipt of this letter to make a formal application.

Mr. Johnson Page 3 January 31, 1991

We emphasize our interest to work with you in this matter to the extent we can, and to coordinate our efforts with the other agencies involved. We should probably schedule a meeting with DOGM to discuss matters regarding reclamation, monitoring, bonding, and time frames for work, in the very near future. However, we trust you understand the importance and advantage to resolve all of these issues before reclamation proceeds.

Many of the items needed for a ground water permit such as water level maps, water samples and monitoring wells have already been installed or are already available in the files. After we receive your application for a permit we will review the information and determine what additional data may be needed.

If you have any questions please call Mack Croft at 538-6146.

Sincerely,

Utah Water Pollution Control Committee

Don A. Ostler, P.E. Executive Secretary

DAO:MC:kc:pb/mhf

cc:

Wayne Thomas, District Engineer Southwestern District Health Dept. DOGM BLM

Q:HECLAGW.LTR